WHAT IS CLAIMED IS:

1. An engine control apparatus comprising:

a switch case fixed to a handle bar;

a stop switch body that is formed in the switch case and that allows an engine to stop or to be in an idling state;

a stop switch knob that is formed in the switch case and that abuts with the stop switch body to activate the stop switch body to allow the engine to stop or to be in an idling state;

a lock plate insertable to the stop switch knob;

a transponder that is provided at the lock plate side and that transmits a predetermined ID code; and

a control section that receives the ID code transmitted from the transponder and that controls the engine operation based on the ID code,

in the control section, an antenna that receives the ID code transmitted from the transponder is integrally formed with a communication circuit for the ID code, the antenna and the communication circuit being provided at the switch case, wherein

when the lock plate is disengaged from the stop switch knob, the stop switch body is activated to allow the engine to stop or to be in an idling state.

2. The engine control apparatus according to Claim 1, further comprising:

an authentication circuit formed in a substrate provided in the switch case, wherein

the substrate forms the antenna and a penetrated hole to which the stop switch knob to be inserted.

3. The engine control apparatus according to Claim 1, further comprising:

an authentication circuit for the ID code from the transponder integrally formed in the control section.